UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/566,742 | 01/31/2006 | Peter Rohringer | PW322933APCT | 2269 |

324 7590 12/11/2008

JoAnn Villamizar
Ciba Corporation/Patent Department
540 White Plains Road
P.O. Box 2005
Tarrytown, NY 10591

| EXAMINER | |
|---|---|
| CORDRAY, DENNIS R | |
| ART UNIT | PAPER NUMBER |
| 1791 | |
| MAIL DATE | DELIVERY MODE |
| 12/11/2008 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/566,742 | ROHRINGER ET AL. | |
| | Examiner | Art Unit | |
| | DENNIS CORDRAY | 1791 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/1/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 9 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites in the last line the limitations "the metering size-press" and "the film press" in an earlier portion of the claim. There is insufficient antecedent basis for this limitation in the claim. This rejection might be overcome by changing the limitations to "a metering size-press" and "a film press".

Claim 9 provides for the use of the composition of Claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what

method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

***Claim Rejections - 35 USC § 102***

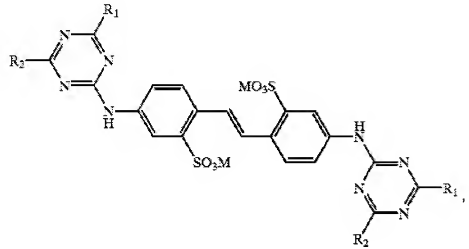
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Englehardt et al (6302999 or US 2002/0084049).

Englehardt et al ('999 and '049) each disclose aqueous dispersions of FWA and a swellable layered silicate (further auxiliary); a process for the fluorescent whitening of paper comprising applying the dispersions to the paper pulp, to a coating composition, or to a size or metering press; and paper whitened using the dispersions. The swellable layered silicate is present in the dispersion in an amount from 2 to 60 wt-% of the composition and the FWA is present from 0.1 to 15 wt-% of the silicate. For dispersions comprising from 33.3-40 wt-% silicate, the amount FWA can be present at up to 5-6 wt-% of the dispersion. See ('999-Abs; col 1, lines 4-7, 14-17 and 40-51; col 5, lines 47-58; col 8, lines 6-19; col 9, lines 27-34; col 10, lines 33-35; Claims 1 and 4-8) Also see ('049-Abs; p 1, pars 1, 3, 8 and 9; p 3, par 23; p 4, pars 33-34; p 5, pars 39 and 44; p 6, pars 56 and 58; Claims 1, 15, 16, 18 and 19).

In preferred embodiments, the FWA has the formula:



wherein the substituents $R_1$ and $R_2$, independently, are morpholino, -N($CH_2CH_2OH$)$_2$, -N($CH_3$)($CH_2CH_2OH$), -$NH_2$, -N($C_1$-$C_4$ alkyl)$_2$, $OCH_3$, -Cl, -NH($CH_2CH_2SO_3H$), -$CH_2CH_2OH$ or ethanolaminopropionic acid amide and M is H, K, Na ammonium or ammonium that is mono, -di, -tri or tetra-substituted by $C_1$-$C_4$ alkyl and/or $C_1$-$C_4$ hydroxyalkyl. The claimed FWA is thus disclosed. See ('999- col 1, line 60 to col 2, line 26; Claim 3) Also see ('049- p 1, pars 12-14; Claims 9 and 11).

Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Fringeli (4364845).

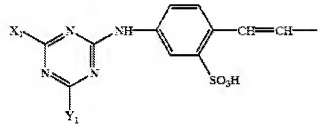
Fringeli discloses an aqueous composition of 10-30 wt-% FWA, 10-80 wt-% lactam (auxiliary) and 10-80 wt-% water. A preferred FWA has the general formula as disclosed by Englehardt et al, wherein the substituents $R_1$ and $R_2$, independently, are -$NH_2$, -$NHCH_3$, -$NHC_2H_5$, -NH($CH_3$)$_2$, -NH($C_2H_5$)$_2$, -NH($CH_2CH_2OH$), -N($CH_2CH_2OH$)$_2$, -N($CH_2CH_2CH_2OH$)$_2$, -N($CH_3$)($CH_2CH_2OH$), -NH($CH_2CH_2OCH_2CH_2OH$), -OH, -$OCH_3$, -$OCH(CH_3)_2$, $OCH_2CH_2O$ $CH_3$, morpholino and substituted or unsubstituted

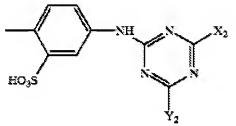
phenylamines. The disclosed composition significantly overlays the claimed composition (Abs; col 1, lines 7-13; col 2, lines 49-55; col 3, lines 29-67; col 4, lines 43-48). In an example, a composition comprises by weight 36.5% FWA, 33.3% caprolactam and auxiliaries and 30.2% water (col 7, Example 1). Fringelli discloses a method of whitening paper and paper whitened by the compositions. The method comprises adding the whitening composition to paper pulp, to a coating composition or to a size press composition (col 4, lines 57-68; col 5, lines 1-3; cols 7-8, Examples 1a, 1b and 2a).

Claims 1-7 and 9-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rohringer et al (5976410).

Rohringer et al discloses an aqueous dispersion of FWA a polyhydroxyl compound and, optionally, further additives; methods the fluorescent whitening of paper comprising applying the dispersion to the paper pulp or to a coating composition; and paper whitened using the dispersions. The dispersions comprise from 5 to 60 wt-% of the FWA, from 0.01 to 3 wt-% of the polyhydroxyl compound and less than 2 wt-% electrolyte.

In some embodiments, the FWA has the formula:





wherein $X_1$, $X_2$, $Y_1$ and $Y_2$, independently, are -$NH_2$, a primary or secondary amine radical, or a branched or unbranched alkoxy or phenoxy group. Many of the claimed substituents on the FWA are thus disclosed or, at least, would have been obvious to one of ordinary skill in the art from the disclosure (Abs; col 1, lines 4-8 and 41-44; col 2, lines 1-42; col 4, lines 33-38; col 5, lines 30-45 and 63-67; col 6, lines 36-62; Claims 1, 3-5, 18 and 19).

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-5 and 6-11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 10 and 12-14 of copending Application No. 10/585956. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application recite a mixture of FWAs, some of which overlay the claimed FWA. The copending claims thus define a species of and anticipate the instant application. Note that the open claim language of the instant application allows for additional FWAs outside of those claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 5 and 7 of U.S. Patent No. 4364845. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent embody FWAs that overlay those of the instant claims. Note that the open claim language of the instant application allows for the inclusion of lactam.

Claims 1-7, 9 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5, 18 and 19 of U.S. Patent No. 5976410. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent embody FWAs that overlay those of the instant claims.

Claims 1-5, 9 and 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6 and 8 of U.S. Patent No. 6464832. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent embody FWAs that overlay those of the instant claims. Note that the open claim language of the instant application allows for the inclusion of a swellable layered silicate.

Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 3-7 of U.S. Patent No. 6302999. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent embody FWAs that overlay those of the instant claims.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rohringer (6797752), Nelson (5902454) and Tegtmeyer et al (EP-1300513) disclose other compositions comprising FWAs used for whitening paper. Rohringer et al (6143888) discloses FWA compositions used for treating paper for other purposes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/
Supervisory Patent Examiner, Art Unit 1791

/Dennis Cordray/
Examiner, Art Unit 1791